





7017 MAR 16 P 4: 10

March 16, 2012

AZ CORP COMMISSION DOCKET CONTROL

**Docket Control** Arizona Corporation Commission 1200 West Washington Street Phoenix, Arizona 85007

Re:

COMMENTS - WORKSHOP ON METER GUIDELINES

DOCKET NO. E-00000C-11-0328



Thou

Senior Counsel Pinnacle West Capital Corp., Law Department

Mail Station 8695 PO Box 53999 Phoenix, Arizona 85072-3999 Tel 602-250-2052 Email Thomas.Mumaw@pinnaclewest.com

Arizona Corporation Commission DOCKETED



Arizona Public Service (APS or Company) appreciates the opportunity to provide comments on the Draft Proposed Meter Guidelines (Guidelines) filed by Staff on February 24, 2012 in the above mentioned Arizona Corporation Commission (ACC or Commission) The Company's comments are presented in three sections: (i) introductory comments regarding customer confidentiality, privacy, and data security; (ii) comments specific to each of Staff's Guidelines; and (iii) responses to Staff's Questions Regarding Proposed Guidelines for Electric Meters.

## I. Introduction

The privacy and confidentiality of customers information is a priority for APS. Today, Commission regulations, approved rate and service schedules, state statutes and federal regulations are in action to protect the privacy of customer information and are further described below. In addition to these policies, all APS employees receive annual mandatory training on the Company's code of ethics, which specifically identifies customer information as confidential and restricts the release or disclosure of this information to outside parties.

The Company's Commission-approved Code of Conduct (the Code) includes a section on the confidentiality of customer information:1

> APS shall not provide Confidential Customer Information to any Competitive Electric Affiliate or a Third Party without the customer's prior written authorization, which may include a printed version of an electronic authorization. Such information may be provided only to the extent specifically authorized.<sup>2</sup>

Compliance with the Code is mandatory, and annual training is required of all employees. Every employee is expected to abide by these rules in the daily course of business.

Data privacy is specifically addressed in the Commission's current rules and regulations. Arizona Administrative Code R14-2-203(A)(2) states:

<sup>&</sup>lt;sup>1</sup> APS's Code of Conduct for the Arizona Corporation Commission, Part Two, Section III, Paragraph A. Confidential Customer Information is defined as any non-public, customer-specific information obtained by APS as a result of providing Noncompetitive Services.

<sup>2</sup> Such authorization may be pursuant to A.A.C. R14-2-203(A)(2).

Customer-specific information shall not be released without specific prior written customer authorization unless the information is requested by a law enforcement or other public agency, or is requested by the Commission or its staff, or is reasonably required for legitimate account collection activities, or is necessary to provide safe and reliable service to the customer.

Additionally, APS has included a section in its Service Schedule 1 addressing the confidentiality of customer-specific information:<sup>3</sup>

Customer-Specific Information – Customer-specific information shall not be released without specific prior written Customer authorization unless the information is requested by law enforcement or other public agency, or is requested by the Arizona Corporation Commission or its staff, or is reasonably required for legitimate account collection activities, or is necessary to provide efficient, effective, safe, or reliable service to the Customer. Customer-specific information may be provided to suppliers of goods or services under contract with Company if:

Such goods or services will assist Company in providing efficient, effective, safe, or reliable service; and

Such contract includes a requirement that the information be kept confidential and is only used to fulfill the supplier's obligations to Company.

The consumer's right to privacy and confidentiality is also addressed in Arizona statutes. Arizona Revised Statutes §44-1376 through §44-1376.05 specifically address information contained in public utility records. The statutes state that acquisition, receipt, or sale of customer data without the customer's permission is unlawful. Entities that maintain such customer information records (such as APS) must establish procedures to protect the records from unauthorized or fraudulent disclosure that could harm or inconvenience the customer. Disclosure of this information is allowed under certain specific instances, such as the provision of service or to protect from fraud and abuse, if requested by law enforcement, to a government entity if necessary due to an emergency, or if requested by the Commission for performance of their official duties. Finally, federal law also requires the Company to develop and follow procedures designed to protect the confidentiality of consumer-specific information.<sup>4</sup>

APS consistently follows the policies and requirements that have been in place for years. It is the Company's belief that additional policies and/or rules to protect customer privacy in addition to Arizona statute, the Arizona Administrative Code, current Commission-approved policies, and existing APS internal confidentiality policies may be redundant and are unnecessary.

<sup>&</sup>lt;sup>3</sup> Service Schedule 1: Terms and Conditions for Standard Offer and Direct Access Services, Paragraph 2.9. This paragraph has been added as a part of the Company's currently pending rate case in Docket No. E-01345A-11-0224.

<sup>&</sup>lt;sup>4</sup> 15 U.S.C. 1681 et. seq.

When deploying meters and metering configurations, APS employs the most up-to-date technology available from our vendors to protect the security of customer usage data. The Company continually upgrades its security protocols to align with industry standards and applicable best practices. APS also participates in industry collaborative committees which address and debate appropriate cyber security standards, conduct research, and share knowledge of meter technology availability and related issues. APS believes that the Company's current practices and protocols are more than adequate to ensure customer energy usage data security. However, if the Commission decides to incorporate data security policies into the Guidelines, certain revisions to Staff's proposals are necessary to allow utilities to pursue appropriate cost-effective technologies and develop reasonable protocols.

## II. Staff Draft of Proposed Meter Guidelines

APS offers the following comments on each of the specific Guidelines as proposed by Staff:

Proposed Meter Guideline #1: Measurement will not be specific to any particular appliance or electrical device, unless approved by the Commission for a specific tariff.

As written, this guideline severely limits APS's ability to serve its customers under the Company's current tariff. For example, the Company has individual meters on many general service accounts that have only one type of end-use device such as traffic lights, billboards, sprinkler systems, and well pumps. All are served under Rate Schedule E-32, which is not a "specific tariff" for such individual types of customer loads. Most of these have been placed by necessity (remote locations or required wiring configurations) or at the customer's request. Also, certain residential customers in the Company's service territory have legacy meters which separately meter water heating system energy usage, dating from the time when APS offered a separate rate schedule for these systems. APS no longer installs separate meters on water heaters or offers a rate schedule for this service; however, removing existing meters would require re-wiring of the residence at significant cost to the customer. Therefore, as an accommodation to the customer, APS merely adds the water heater consumption to the remaining household usage for billing purposes.

In addition, the Company's Demand-Side Management (DSM) Implementation Plans and Renewable Energy Standard (RES) Implementation Plans contemplate programs in which both residential and commercial end-use devices would be measured for research and/or for evidence of specific demand/energy savings. Programs approved in these plans do not normally have an associated rate or service schedule. In fact, the Commission's most recent RES order requires APS to install individual meters on customer-owned solar panels to accurately count production for compliance purposes, a requirement that appears would be prohibited by this guideline.

To avoid the apparent restrictions this guideline imposes, APS suggests the following changes to the proposed language:

Unless authorized by the customer, measurement will not be specific to any particular appliance or electrical device unless approved by the Commission for a specific tariff or program. Meters that only measure a single electrical device or a group of such devices will be permitted under this standard.

Proposed Meter Guideline #2: The utility will not share energy usage data except with its authorized agent. Individual or aggregate usage data will never be sold.

This guideline appears to prevent the dissemination of energy usage to a number of entities to which APS may provide this information under current law such as law enforcement agencies, other government agencies, or even the Commission and its Staff. Legitimate account collection activity would likewise be prevented, to the detriment of other APS customers. The Commission's current rules (as noted earlier in the Company's comments) are very clear regarding the release of customer data without prior customer authorization.

Because this issue is clearly and adequately addressed in the Commission's rules and Arizona statute, APS believes this guideline is unnecessary. Alternatively, APS believes the guideline should follow the language of the existing rule:

Unless authorized by the customer, the utility will not share energy usage data except with entities under contract with the utility and bound to comparable confidentiality provisions, or as requested by law enforcement or other public agencies, as requested by the Commission or its staff, in conjunction with legitimate collection activities, or to provide safe and reliable service to the customer.

Proposed Meter Guideline #3: All information transmitted between meters and the utility must be encrypted and password protected using US government approved and recommended standards.

APS has concerns about publically discussing specific information regarding the encryption of utility metering systems and other protected systems because of security concerns. APS will provide any material comments on metering encryption confidentially to Staff and/or Commissioners. That being said, however, this guideline appears to be overly broad. Solid-state meters are in use in those areas of the Company's service territory where meters capable of electronic transmission have not yet been deployed. These meters do not need and cannot use encryption or password protection protocols, as they must be manually read. APS therefore suggests adding the clarifier "wirelessly" prior to the word "transmitted" as shown below.

Additionally, as of today there are no "US government approved or recommended standards." Therefore, APS recommends the following:

All information wirelessly transmitted between AMI meters and the utility must be encrypted and/or password protected the utility will utilize recognized industry security practices and procedures and will continually update its security protocol to protect customer energy usage data.

Proposed Meter Guideline #4: Data from each meter must use specific unique identifiers associated with the customer's meter number and service address to ensure that each customer is billed only for his/her own usage.

The Company's only comment on this guideline is to note that, at present, only a unique identifier is associated with the meter's data. It is both unnecessary and potentially counterproductive to embed both the meter number and the customer service address within this data. Therefore, APS recommends the following:

Data from each meter must use unique identifier(s) associated with the customer's service to ensure that each customer is billed only for his/her own usage.

Proposed Meter Guideline #5: The utility will not control or shut off individual appliances without customer consent based on an approved ACC tariff.

Please see the Company's comments on Guideline #1. Based on those comments, APS recommends the following:

The utility will not control or shut off individual appliances without customer consent unless authorized by an approved ACC tariff or program.

Proposed Meter Guideline #6: The utility may shut off electric service per ACC rules. The utility will abide by current regulations with respect to shut-off of service and curtailment in power emergencies.

The Commission has, from time to time, approved service schedules and terms and conditions for individual utilities that differ from, and supersede, previous Commission's rules. As an example, APS Service Schedule 1 includes shut-off requirements that contain approved differences from the Commission's rule requirements. Moreover, curtailment is not governed by Commission regulation, but by utility service schedules (in APS's case, Service Schedule 5). Therefore, APS recommends the following:

The utility may shut off electric service per ACC rules or other Commission-approved procedures. The utility will abide by current regulations or other Commission-approved procedures with respect to shut-off of service and curtailment in power emergencies.

Proposed Meter Guideline #7: The utility will limit the length of data transmission over a 24-hour period, (utility input will help define the appropriate length of time in seconds or minutes per time period).

APS believes that an attempt by this Commission to regulate radio frequencies (RF) in any way is outside the scope of the Commission's jurisdiction, and is in direct conflict with the Federal Communication Commission's (FCC) authority over radio transmissions.<sup>5</sup>

APS electronic meters operate far below the exposure limits set forth by the FCC. $^6$  Wireless electronic meters emit RF levels of only approximately 3.26% to 0.13% (as measured two to ten feet from the meter) of the RF limit set by the FCC. These percentages assume that the radio would be operating 100% of the time, when in reality they operate well below 20% of the time.

In comparison, RF transmissions from a microwave oven, cell phones, when in use and held to the ear, can emit RF levels that are significantly higher. Any additional limits placed on frequency or strength of transmissions from APS meters are unreasonable and unnecessary.

For these reasons, APS believes the guideline should be removed in its entirety.

Proposed Meter Guideline #8: Individual usage data gathered will be available only to the customer, the utility, and its duly authorized agent. Such data may be used only to help the customer or make choices that will help keep electric bills to a minimum.

Please see the Company's comments to Guideline #2, as the first sentence of this guideline is similar in nature.

However, the final sentence of the guideline is extremely problematic. The language appears to limit APS's ability to utilize customer consumption data to conduct the everyday business of the utility. For example, individual usage data is utilized by the Company for purposes ranging from billing customers to identifying energy theft to calculating line extension advances. APS also uses individual usage data to estimate bills, identify malfunctioning meters, and validate consumption data. Each of these tasks (and many more) are necessary to provide quality customer service, bill and collect amounts owed, and meet the Commission's rules and requirements.

For the reasons listed above, APS believes the guideline should be removed in its entirety.

.

6 47 CFR §1.1310.

<sup>&</sup>lt;sup>5</sup> This view is shared by other utilities and jurisdictions alike. In the California Public Utilities Commission's (CPUC) order approving a smart meter opt-out provision for Pacific Gas and Electric's residential customers, the CPUC noted that "the issue of whether RF emissions from SmartMeters have an effect on individuals is outside the scope of this proceeding....The FCC's authority over technical aspects of radio communications is longstanding and clear." Decision 12-02-014 dated February 1, 2012 in Application 11-03-014. Likewise, the Public Utilities Commission of Nevada (PUCN) recently issued an order approving an interim advanced meter opt-out program for NV Energy in which it stated "...[these] concerns are beyond the regulatory authority of this Commission. The FCC, not this Commission, establishes standards for the exposure of humans to RF fields." Order in Docket No. 11-10007 dated February 29, 2012.

Proposed Meter Guideline #9: The utility will use only aggregate, anonymous data for system planning purposes.

This guideline restricts APS from conducting prudent business practices to serve its customers. System planning includes performing long range load and resource planning including generation, transmission, and distribution planning. It includes outage management, reliability simulations down to the customer level, transformer and pole maintenance, and substation operation and planning. The utility utilizes data at many different granularity levels to conduct these planning activities across its service territory. For example, APS has one extremely large customer at the end of a long radial transmission line. Whether and when to upgrade that line is entirely dependent upon that single customer's individual, non-aggregated, and non-anonymous data. At the other extreme, APS often sizes individual transformers based on the load of a single residential customer. In fact, one of the major advantages of modern grid technologies is in the utilization of electronically gathered data to pinpoint outages on the distribution system, as discrete as an individual transformer, in order to quickly restore power to customers.

For these reasons, APS believes the guideline should be removed in its entirety.

## III. APS Responses to Staff Questions Regarding Proposed Guidelines for Electric Service

1. Are the draft proposed guidelines currently in effect by most utility companies, or do they represent a significant process change?

As noted in its introduction, APS has long had procedures in place to safeguard customer information from unauthorized disclosure. However, it is accurate to say that the proposed guidelines go beyond any previous Commission rule or utility tariff in restricting the gathering and use of such information for prudent and necessary utility functions. In its comments to the individual guidelines, APS has tried to identify some of the more obvious operational, planning, and customer service problems created by the guidelines if adopted by the Commission without substantive changes such as those discussed above.

2. Does the draft proposed quidelines adequately address privacy issues?

Again, as noted in its comments, APS believes the proposed guidelines are overly restrictive and go beyond the legitimate privacy concerns of customers, which are adequately addressed by current rules, statutes, and APS tariff provisions.

3. What customer education procedures presently exist, or should be developed, for communicating a utility company's privacy policies?

APS agrees that customers should understand how their personal data is handled by the company. In an effort to address customer questions on the topic of personal data privacy, APS utilizes different approaches. As many customers utilize its website, aps.com, to obtain information, the following information can be found under "Your Account Information: Our Commitment" and "Smart Meter FAQs":

"APS places a high priority on the security of customer account information. We do not sell customer data, and we consider all customer information to be confidential. APS complies with the Arizona statutes, as well as the rules and regulations set forth by the Arizona Corporation Commission, that govern the use of customer information by utilities.

The energy usage data collected is intended to help customers make choices that enable them to pay the least amount possible for their electric service. This data also helps APS to efficiently use resources and provide reliable electric service to its customers today and in the future.

We are committed to responsibly providing secure, reliable data through the use of our meters. The meter does not store or transmit any personally identifiable information. We continue to work with meter vendors, electric utilities and governmental agencies to refine security standards and practices to ensure that security remains at the highest level."

APS has similar content in a published brochure titled Smart Meter: Myths and Facts.

In addition, all APS Call Center and Business Office Associates undergo regular training regarding the Company's privacy policies and have access to information specifically developed to assist them in answering customer's questions regarding the privacy of their data.

It has always been APS's belief that it is important to be transparent with its customers. If, for example, the Commission decides to authorize a potential Opt-Out Plan, it may be appropriate to accompany such a Plan with information concerning customer data privacy.

4. What other metering issues need to be addressed?

As noted elsewhere in these comments, APS believes the current combination of Arizona Administrative Code, current Commission-approved policy, Arizona statutes, federal regulations and existing APS internal confidentiality policy is sufficient to address customer energy usage data; therefore, no additional issues need to be addressed.

Sincerely,

Thomas L. Mumaw

Attorney for Arizona Public Service Company

TLM/jj

cc: Parties of Record

Copies of the foregoing delivered this 16<sup>th</sup> day of March, 2012 to:

Michael Curtis
Attorneys for Mohave Electric
Cooperative, Inc.
Curtis, Goodwin, Sullivan, Udall &
Schwab, PLC.
501 E. Thomas Road
Phoenix, AZ, 85012-3205

William Sullivan
Attorneys for Mohave Electric
Cooperative, Inc.
Curtis, Goodwin, Sullivan, Udall &
Schwab, PLC.
501 E. Thomas Road
Phoenix, AZ, 85012-3205

Charles Moore
Manager of Engineering Services
Navopache Electric Cooperative
1878 W. White Mountain Blvd.
Lakeside, AZ, 85929

Tyler Carlson Chief Operating Officer Mohave Electric Cooperative, Inc. P.O. Box 1045 Bullhead City, AZ, 86430

Peggy Gillman Manager of Public Affairs and Energy Services Mohave Electric Cooperative, Inc. P.O. Box 1045 Bullhead City, AZ, 86430

M. Jo Smith 88 E. Broadway Tucson, AZ, 85701

Bradley Carroll Tucson Electric Power Company P.O. Box 711 Tucson, AZ, 85702 Michael Patten Attorneys for Tucson Electric Power Company Roshka Dewulf & Patten, PLC One Arizona Center, 400 E. Van Buren St. - 800 Phoenix, AZ, 85004

John Wallace 120 N. 44th Street - 100 Phoenix, AZ, 85034

Lyn Farmer Chief Administrative Law Judge Arizona Corporation Commission 1200 W. Washington Phoenix, AZ, 85007

Steve Olea Utilities Division Arizona Corporation Commission 1200 W. Washington Phoenix, AZ, 85007

Janice Alward Legal Division Arizona Corporation Commission 1200 W. Washington Phoenix, AZ, 85007

Ajo Improvement Company Post office Drawer 9 Ajo, AZ, 85321

Columbus Electric Cooperative, Inc. P.O. Box 631 Control Box 631 Control Box 631 Control Box 631

Dixie Escalante Rural Electric Assn, Inc 71 East Highway 56 Beryl, UT, 84714-5197

Garkane Energy Cooperative, Inc. P.O. Box 465 Loa, UT, 84747

しごん ともりしいせいり

Graham County Electric Cooperative, Inc. Post Office Drawer B Pima, AZ, 85543

Morenci Water and Electric Co. P.O. Box 68 Morenci, AZ, 85540

SSVEC P.O. Box 820 Wilcox, AZ, 85644 Trico Electric Cooperative, Inc. P.O. Box 930 Marana, AZ, 85644

Jana Brandt
Regulatory Affairs and Contracts
Salt River Project
P.O. Box 52025\MS PAB221
Phoenix, AZ, 85072-2025

Kelly Barr Regulatory Affairs and Contracts Salt River Project P.O. Box 52025\MS PAB221 Phoenix, AZ, 85072-2025

SOUTH ME PARIET